NPDES Permits: Types, Coverage, and Emerging Program Areas



Learning Objectives

- Describe NPDES permit types
- Identify the basic components of an NPDES permit
- Discuss the "universe" of facilities covered by NPDES permits
- Discuss new and emerging program responsibilities



Types of NPDES Permits - Individual

- Individual Permit
 - 1 application submitted → 1 permit issued
 - Appropriate where site-specific limits, management practices, monitoring and reporting, or other facility-specific permit conditions are needed



Individual Permit Issuance Process





Types of NPDES Permits - General

- General Permit (40 CFR 122.28)
 - 1 permit issued → many applications submitted
 - Appropriate where multiple dischargers require permit coverage, sources and discharges are similar, permit conditions are relatively uniform
 - Permit must identify:
 - Area of coverage
 - Sources covered
 - Application process (Notice of Intent)



General Permit Issuance Process





Permit Components

Industry-Specific Components of All Permits Municipal-Specific Components Components **Cover Page Effluent Limitations** Effluent Guidelines Secondary **Technology-Based** BPJ Equivalent to Secondary Water Quality-Based **Monitoring & Reporting** Requirements **Special Conditions** Compliance Schedules Storm Water Pretreatment Special Studies, Evaluations, and • BMPs **CSOs** Other Requirements Municipal Sewage Sludge **Standard Conditions**

Overview of the Current and Projected NPDES Universe (Estimates as of 4/03)

| | Type of Facility | Approximate Number of Facilities |
|-------|---|----------------------------------|
| | Individual Permits | 6,700 |
| Major | • POTWs | (4,200) |
| | Non-municipals | (2,500) |
| | Individual Permits | 48,000 |
| Minor | • POTWs | (16,000) |
| | Non-municipals | (32,000) |
| Minor | Covered by General Permits | 37,000 |
| Minor | Non-Storm Water | |
| | POTWs and industrial facilities | |



Overview of the Current and Projected NPDES Universe (Continued)

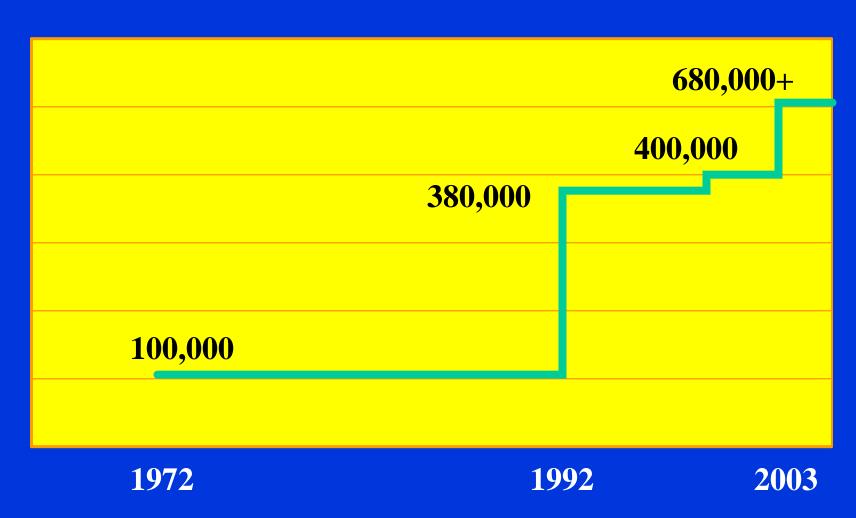
| Type of Facility | Approximate Number of Facilities |
|------------------------------------|----------------------------------|
| Storm water: Phase I MS4s | 270 |
| Storm water: Phase II MS4s | 5,000 |
| Storm water: Phase I Industrial | 90,000 est. |
| Storm water: Phase II Industrial | 80,000 est. |
| Storm water: Phase I Construction | 190,000 est. per year |
| Storm water: Phase II Construction | 200,000 est. per year |
| Sludge-Only Facilities | 6,000 est. |



Number of Regulated Facilities/Sources

Growth of the NPDES Program

(Number of facilities or sources)





Emerging Program Areas

- Storm Water Phase II Implementation
- CAFO Program Implementation
- Cooling Water Intake Structures CWA §316(b)
- Sanitary Sewer Overflows ?
- Aquatic Herbicides and Pesticides ?
- Ballast Water (invasive species) ?
- Water Transfers ?



NPDES Storm Water Program

- Phase I November 16, 1990
 - Medium and Large Municipal Separate
 Storm Sewer Systems (MS4s)
 - Industrial Activity, including large construction activity (>5 acres)
- Phase II December 8, 1999
 - Small MS4s
 - Small construction activity (1-5 acres)
 - No exposure (industrial activity)



Storm Water Phase II

- Implementation Timeline
 - Small construction activities (1 5 acres) permitted by 3/10/03
 - Small MS4s submit application or NOI by 3/10/03
 - "No exposure" waivers available since 12/99
- Additional information and fact sheets:
 - www.epa.gov/npdes/stormwater



Concentrated Animal Feeding Operations

- Revisions to NPDES Regulations and CAFO Guideline signed 12/15/02 (FR 2/12/03)
- New rule effective 4/14/03
- Requires permit coverage for approximately 15,500 CAFOs
- State NPDES programs should be revised as needed within 1 year
 - 2 years if legal authority change required



Concentrated Animal Feeding Operations

- All Large Operations Must Apply
 - Permit Exemption Eliminated
 - Dry Poultry Included
- Effluent Limitation Guidelines (ELG)
 - No Discharge exc. large rainfall (e.g. 25/24)
 - Land Application Requirements (N and P)
- Nutrient Management Plan Required
 - Implement by December 2006
- Annual Report Required



Cooling Water Intake Structures - CWA § 316(b)

- Phase I Final Regulations for new facilities
 - 40 CFR 125. 80
 - December 18, 2001 (65 FR 65256)
 - Applies to new power plants and manufacturers that have NPDES permits, withdraw > 2 MGD from waters of the U.S., and use 25% or more for cooling
 - Standards differ based on design intake flow and water-body type



Cooling Water Intake Structures - CWA § 316(b)

- Regulations for Existing Facilities:
 - Phase II Large Power Plants
 - Proposed 2/28/02
 - Planned final 2/16/04
 - Phase III Small Power Plants and Manufacturers
 - Planned proposed 11/1/04
 - Planned final 6/1/06
- http://www.epa.gov/waterscience/316b



Sanitary Sewer Overflows (SSO)

- Draft Proposed SSO Rule
 - January 4, 2001 draft notice of proposed rulemaking
 - January 24, 2001 notice withdrawn
- EPA is continuing to consider options, but no schedule for re-proposal
- http://www.epa.gov/npdes/sso

